

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently amended) A disk drive comprising:
a disk medium adapted for perpendicular magnetic recording;
a read head ~~which reads~~ constructed and arranged to read a perpendicular magnetic recorded data signal from the disk medium;
a preamplifier circuit including a read amplifier ~~which amplifies~~ constructed and arranged to amplify a read signal output from the read head, and ~~a differentiation circuit which differentiates a read signal output from the amplifier~~ an adjusting circuit constructed and arranged to adjust a low cut-off frequency of the signal output from the read amplifier;
and
a data channel ~~which reproduces~~ constructed and arranged to reproduce data from the read signal output from the preamplifier circuit.

2. (Cancelled)

3. (Currently amended) The disk drive according to claim 2 1, wherein the adjusting circuit comprises a filter circuit ~~which adjusts~~ constructed and arranged to adjust the low cut-off frequency to 50 kHz or less or in the range of from 1/2000 or less of the maximum recording frequency of the disk medium to a DC level.

4-7. (Cancelled)

8. (Currently amended) A preamplifier device for a disk drive including a disk medium adapted for perpendicular magnetic recording and a read head ~~data~~ constructed and arranged to read data signal from the disk medium, said preamplifier device comprising:

a read amplifier ~~which amplifies~~ constructed and arranged to amplify a read signal output from the read head; and

an adjusting circuit ~~which adjusts~~ constructed and arranged to adjust a low cut-off frequency of a read signal output from the read amplifier; ~~and~~

~~a differentiation circuit which differentiates the read signal adjusted by the adjusting circuit.~~

9. (Currently amended) The preamplifier device according to claim 8, further comprising:

a circuit ~~which sends~~ constructed and arranged to send the read signal output from the ~~differentiation circuit~~ the adjusting circuit to a data channel included in the disk drive, the data channel ~~restoring~~ being constructed and arranged to restore perpendicular magnetic recorded data onto the disk medium.

10. (Currently amended) The preamplifier device according to claim 8, wherein the adjusting circuit comprises a filter circuit ~~which adjust~~ constructed and arranged to adjust the low cut-off frequency to 50 kHz or less or in the range of from 1/2000 or less of the maximum recording frequency of the disk medium to a DC level.

11-22. (Cancelled)

23. (New) The disk drive according to claim 1, wherein the adjusting circuit is constructed and arranged to adjust the low cut-off frequency such that waveform deformation of the read signal is reduced.

24. (New) The preamplifier device according to claim 8, wherein the adjusting circuit is constructed and arranged to adjust the low cut-off frequency such that waveform deformation of the read signal is reduced.